

## ABSTRACT

The invention relates to packet control units, a traffic management system (TMSYS) and a method for managing in a network (RDN) the object traffic formed on a physical layer (PL). In the physical layer (PL) these objects move along path sections between individual path points ( $P_x$ ,  $P_a$ ,  $P_b$ ,  $P_c$ ). The traffic management system comprises a packet switched control network (PSCN) including said packet control units ( $R_x$ ,  $R_a$ ,  $R_b$ ,  $R_c$ ) on a traffic control layer (TCL) in which packets moving along packet routing links between packet control units ( $R_x$ ,  $R_a$ ,  $R_b$ ,  $R_c$ ) simulate the movement of corresponding objects in the physical layer (PL). If the arrival of an object (C) is detected at a path point (e.g.  $P_x$ ) and the arrival of a corresponding packet is not detected at a packet control unit ( $R_x$ ) corresponding to the path point ( $P_x$ ), a synchronisation device (SYNC) in a packet control unit (e.g.  $R_a$ ) causes the sending of a packet corresponding to the object to the packet control unit ( $R_x$ ) corresponding to the path point ( $P_x$ ) at which the object (C) has arrived. Thus, out of synchronisation states between the packet routing and object movement can be avoided. The invention is particularly useful for managing the vehicle traffic of vehicles moving along roads in a road network.

(Fig. 3)